This listing of claims will replace all prior versions, and listings, of claims in the application:

Please amend the claims as follows:

In the claims

Claim 1 (currently amended): A method for reading and decoding data from an optical medium recorded according to a proprietary format based on a predetermined ECMA standard, comprising:

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reading channel bits from the optical medium;

removing sync codes from the channel bits to derive a plurality of ESM (eight to sixteen modulation)-encoded words;

decoding the ESM-encoded words to generate a plurality of recording frames;

rearranging the recording frames to generate an ECC block;

removing parity bytes from the ECC block to generate a plurality of scrambled data frames;

descrambling the scrambled data frames to generate a plurality of encoded data frames;

inverting at least one ~~selected~~ bit at a predetermined location of each encoded data frame to generate a plurality of data frames, wherein only after inverting each data frame including the inverted bit has a correct or valid value according to the predetermined ECMA standard; and

extracting main data from the plurality of data frames.

Claim 2 (currently amended): The method of claim 1, wherein inverting at least one ~~selected~~ bit of each encoded data frame to generate the data frames comprises inverting at least one ~~selected~~ bit of a sector number of each encoded data frame.

Claim 3 (currently amended): The method of claim 1, wherein inverting at least one ~~selected~~ bit of each encoded data frame to generate the data frames comprises inverting at least one ~~selected~~ bit of a sector information field of each encoded data frame.

Claim 4 (currently amended): The method of claim 1, wherein inverting at least one ~~selected~~ bit of each encoded data frame to generate the data frames comprises inverting at least one ~~selected~~ bit of an ID Error Detection Code field of each encoded data frame.

Claim 5 (currently amended): The method of claim 1, wherein inverting at least one ~~selected~~ bit of each encoded data frame to generate the data frames comprises inverting at least one ~~selected~~ bit of an Error Detection Code field of each encoded data frame.

Claim 6 (currently amended): The method of claim 1, wherein inverting at least one ~~selected~~ bit of each encoded data frame to generate the data frames comprises inverting at least one ~~selected~~ bit of a data field of each encoded data frame.

Claim 7 (original): The method of claim 1, further comprising performing error checking and correction on the ECC block using the parity bytes prior to descrambling the scrambled data frames.

Claim 8 (previously presented): The method of claim 1, wherein reading the channel bits from the optical medium comprises:

deriving NRZI-encoded pulses from the optical medium; and

decoding the NRZI-encoded pulses to generate the channel bits.

Claim 9 (currently amended): A method for recording data on an optical medium <u>according to a proprietary format based on a predetermined ECMA standard</u>, comprising:

receiving main data;

determining a plurality of data frame values in response to the main data;

inverting at least one ~~selected~~ bit in <u>a predetermined location</u> at least one of the data frame values to generate a plurality of encoded data frames;

scrambling the encoded data frames;

generating ECC values in response to the scrambled data frames;

adding the ECC values to the scrambled data frames to generate an ECC block;

rearranging the ECC block to generate a plurality of recording frames;

encoding the recording frames by an eight-to-sixteen modulation to generate code words;

adding sync values to the code words to generate a plurality of physical sectors; and

recording the physical sectors on the optical medium<u>, wherein at least one of the recorded physical sectors including the inverted bit has an incorrect or invalid value according to the predetermined ECMA standard</u>.

Claim 10 (previously presented): The method of claim 9, further comprising NRZI encoding the physical sectors prior to recording the physical sectors on the optical medium.

Claim 11 (currently amended): The method of claim 9, wherein inverting at least one ~~selected~~ bit in at least one of the data frame values comprises inverting at least one ~~selected~~ bit of a sector number value.

Claim 12 (currently amended): The method of claim 9, wherein inverting at least one ~~selected~~ bit in at least one of the data frame values comprising inverting at least one ~~selected~~ bit of a sector information field.

Claim 13 (currently amended): The method of claim 9, wherein inverting at least one ~~selected~~ bit in at least one of the data frame values comprises inverting at least one ~~selected~~ bit of a ID Error Detection Code field.

Claim 14 (currently amended): The method of claim 9, wherein inverting at least one ~~selected~~ bit in at least one of the data frame values comprises inverting at least one ~~selected~~ bit of an Error Detection Code field.

Claim 15 (currently amended): The method of claim 9, wherein inverting at least one ~~selected~~ bit in at least one of the data frame values comprises inverting at least one ~~selected~~ bit of a data field.

Claim 16 (previously presented): The method of claim 1, where prior to the inverting, the data has an incorrect or invalid value according to a predetermined ECMA standard.

Claim 17 (cancelled)

Claim 18 (currently amended): An optical medium on which is recorded information <u>according to a proprietary format based on a predetermined ECMA standard</u> comprising:

an identification field;

an identification error detection field;

a main data field; and

an error detection code field;

wherein the fields are in a data frame, and at least one ~~selected~~ bit <u>at a predetermined location</u> in the data frame is inverted so as to have an incorrect or invalid value according to ~~a predetermined~~ <u>the predetermined</u> ECMA standard.

Claim 19 (currently amended): A system for recording data on an optical medium according to a proprietary format based on a predetermined ECMA standard, comprising:

an input terminal for receiving main data;

a framer having an input terminal coupled to the input terminal;

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a data frame encoding system having an input terminal coupled to an output terminal of the data framer and adapted to invert at least one ~~selected~~ bit at a predetermined location in at least one of the data frames received from the framer;

a scrambler having an input terminal coupled to an output terminal of the encoding system;

an error correction code generator having an input terminal coupled to an output terminal of the scrambler;

an error correction code encoding system having an input terminal coupled to an output terminal of the error correction code generator;

a recording frame generator having an input terminal coupled to an output terminal of the error correction code encoding system;

an ESM (eight-to-sixteen modulation) encoder having its input terminal coupled to an output terminal of the recording frame generator;

a physical sector generator having an input terminal coupled to an output terminal of the ESM encoder; and

a write head coupled to an output terminal of the physical sector generator, thereby to record on the optical medium, wherein at least one of the recorded physical sectors including the inverted bit has an incorrect or invalid value according to the predetermined ECMA standard.

Claim 20 (currently amended): A drive for reading and decoding data recorded according to a proprietary format based on a predetermined ECMA standard from an optical medium, comprising:

a read head adapted to read data from the optical medium;

a physical sector reader coupled to the read head;

an ESM (eight-to-sixteen modulation) encoder coupled to an output terminal of the physical sector recorder;

a recording frame reader having an input terminal coupled to an output terminal of the ESM encoder;

a decoding system having an input terminal coupled to an output terminal of the recording frame reader and adopted to invert at least one ~~selected~~ bit at a predetermined location in at least one frame received from the recording frame reader, wherein only after the inversion the at least one frame has a correct or valid value according to the predetermined ECMA standard;

an error correction code reader having an input terminal coupled to an output terminal of the decoding system;

a descrambler having an input terminal coupled to an output terminal of the error correction code reader; and

a data frame decoder having an input terminal coupled to an output terminal of the descrambler.